RECORD OF *STELLIFER COLONENSIS* MEEK & HILDEBRAND, 1925 (PISCES : SCIAENIDAE) ON THE COASTS OF SOUTH AMERICA, VENEZUELA

by

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ABSTRACT. – Specimens of *Stellifer colonensis* known until present date solely from Panamá, Puerto Rico, and Haiti were collected in the occidental and central coast of Venezuela. The analysis of 31 specimens shows morphometric differences with the original description of Meek and Hildebrand (1925) and with the data cited by Chao (1978). It is suggested that the differences found are fundamentally due to geograpgical variation among populations.

RÉSUMÉ. – Des exemplaires de l'espèce *Stellifer colonensis*, connue jusqu'à présent de Panamá, Porto Rico et Haiti, ont été récoltés pour la première fois sur la côte occidentale et centrale du Venezuela. L'étude de 31 exemplaires révèle des différences morphométriques avec la description originale de Meek et Hildebrand (1925) et avec les caractères que cite Chao (1978). Les différences observées peuvent être dues aux variations géographiques à l'intérieur des populations.

Key-words : Stellifer colonensis, Sciaenidae, Teleostean, Venezuela, Morphometry.

Stellifer colonensis was described with specimens from Panamá by Meek and Hildebrand, 1925 : 625, Pl. 46, fig. 1, Mindi reef, Mindi, Panamá, Chao (1978) reports the species from Panamá, Puerto Rico, and Haiti. The species never have been recorded from the Atlantic coast of South America. In this note, the main characteristics of the species, and the differences found among the morphometric data of 31 specimens caught on the Venezuelan coast, with the data of the original description made by Meek and Hildebrand, are described. The holotype deposited in the U.S. National Museum (USNM) N^{o} 81729, 125 mm total length and also the other 42 specimens (50 to 140 mm) preserved by Meek and Hildebrand, were not examined.

METHODS

The standard methods of Hubbs and Lagler (1964), were used for all counts and measurements, except for eye diameter that was mesured horizontally. The morphological terminology follows that used by Chu, Lo and Wu (1963), Trewavas

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(1964), Chao and Miller (1975), and Chao (1978).

Of 31 specimens examined, 25 were from the occidental coast of Venezuela, caught in january 1982 in front of Punta Capana (Figure 1), about six miles from the coast, at a depth between eight to ten fathoms, using trawl nets, in a exploratory expedition of the laboratory of Ichthyology of the Programa Ciencias del Mar, Universidad Nacional Experimental Francisco de Miranda (UNEFM); and six specimens were from Bahia Morón, central coast of Venezuela, caught in November 1978 in beach seine samples made by the Laboratory of Ichthyology of the Instituto de Tecnologia del Mar (INTECMAR) of the Universidad Simón Bolivar (USB). All the specimens are deposited in the Museo de Biología, Universidad Central de Venezuela (MBUCV) with numbers - V - 13813 and - V - 14114.

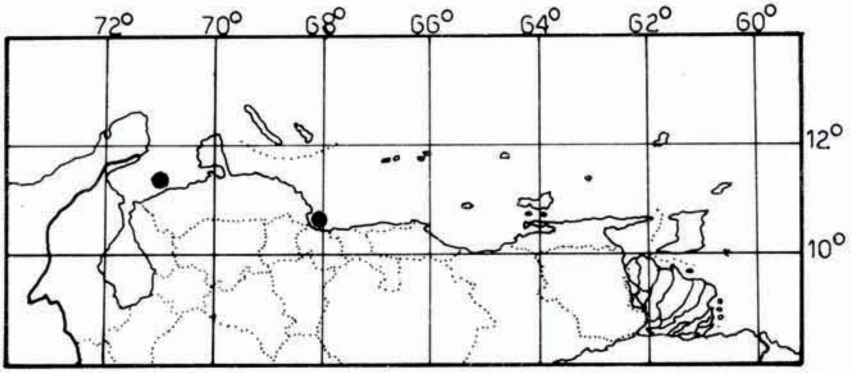

Fig. 1. – Records of *Stellifer colonensis* on the Atlantic coast of South America, Venezuela.

RESULTS

The total length of the specimens vary from 54,4 mm to 107,6 mm. The meristic data (Table I) are in agreement with those described by Meek and Hildebrand (1925) and Chao (1978). However, there are noticeable differences in the relation of interorbital width in head between these specimens and those described by Meek and Hildebrand (Table III), and also respect to body depth in standard length (3,0 to 3,5 times with a mean of 3,3 in the specimens examined, and 2,9 to 3,1 times in the description of Meek and Hildebrand). Furthermore, the maxilla reaches a point behind the vertical of middle of eye, while, according to the original description, it extends behind the posterior margin of eye. Additionally, according to Chao (1978) the eye diameter of *Stellifer colonensis* is comprised 5,5 to 6,2 times in head length; in the specimens examined this relation varies from 3,6 to 5,4 times with a mean of 4,7.

The differences mentioned above, together with other small differences showed in Table III, are probably due to geographical variations among the populations from Panamá, the Antilles, and the populations of Venezuelan coast. In addition, variations between the results of Meek and Hildebrand and those cited in this note may exist due to the differences in sample size and range of length of the specimens.

TABLE I

Meristic data

	Spines			Soft rays						
	X+II	XI+I	XI+II	18	19	20	21	22	23	24
Dorsal	3	26	2	-	-	-	3	13	13	2
Pectoral	-	-	-	16	13	2	-	-	-	-

	Scales			
	47	48	49	50
Lateral line	1	3	4	1

	Superiors			Inferiors			Totals			
	9	10	11	19	20	21	29	30	31	32
Gill Rakers	1	21	9	10	15	6	10	10	8	3

TABLE II

Measurements expressed as percentages of the standard length of the specimens examined

	Intervals	Means
Standard length (mm)	43,9 - 83,8	-
Eye	6,1 - 8,2	6,7
Maxilla	13,1 - 16,0	14,7
Interorbitary	9,0 - 10,7	9,9
Head	29,6 - 33,3	31,7
Depth	28,6 - 33,3	30,7
Pectoral	22,2 - 28,8	26,5
Pelvic	19,9 - 27,1	23,4
2^{o} Anal spine	13,8 - 19,2	16,7

TABLE III

Measurements expressed in times in head length

	Meek and Hildebrand, 1925	Specimens examined	Means
Interorbitary	2,8 - 3,1	2,8 - 3,6	3,2
Snout	3,6 - 4,5	3,5 - 4,1	3,8
Maxilla	2,2 - 2,5	2,0 - 2,4	2,2
2^{o} Anal spine	1,9 - 2,4	1,7 - 2,2	1,9
Pectoral	1,1 - 1,2	1,1 - 1,5	1,2

Table II shows some measurements expressed as percentages of the standard length of the 31 specimens examined.

The specimens have six mental pores (two central and four marginal) and eight rostral pores (three central and five marginal). The swim bladder has two chambers, the anterior one is yoke-shaped with a pair of posterolateral bulb-like diverticula; the posterior is carrot-shaped. The body cavity extends behind the vent. The peritoneum is translucent. The intestine is short (44,2 % to 63,8 % of SL in specimens of 64,0 mm to 83,2 mm SL) with two loops; three to five thick and short pyloric caeca (N=5). The otoliths (sagitta and lapillus) from preserved specimens showed « erosion » at their margins, and both are large. The ostium of the sulcus of the sagitta is short in length, reaching the anterior margin of the otolith, while the cauda turns obliquely towards the ventral margin. The sagitta seems to be truncated towards the middle of the ostium. The lapillus is large, about the half of the sagitta, and has an anteroventral deep groove on its inner surface that opens at the ventral margin. The number of vertebrae is 10+15=25 (N=2), and the first caudal vertebra was distinctively recognized by its trident shaped haemal spine.

Squamation

Body covered mostly with ctenoid scales, except the head and snout which have cycloid scales. Sheaths of cycloid scales are at the bases of the dorsal and anal fins. The inter-radial membranes of dorsal, anal, and caudal fins are covered of small cycloid scales. There are cycloid scales at the base of pectorals. The lateral line is covered of small cycloid scales, that are intercalated among the ctenoid scales perforated by the lateral line tubules. These ctenoid scales vary from 47 to 50 in number.

Coloration

Specimens preserved in 70 % alcohol have a uniform pale yellowish coloration. Snout and flanks of the body with scattered chromatophores. High density of chromatophores at border of superior lip forming a continuous black line. High density of chromatophores at superior angle of preopercle forming a black enlarge spot.

Geographical distribution

Until present date, the species was reported from Panamá, (Meek and Hildebrand, 1925), and from Panamá, Puerto Rico, and Haiti (Chao, 1978). The 31 specimens reported in this note, represent the first record of *Stellifer colonensis* from the occidental and central coast of Venezuela, and enlarge the geographical distribution of the species as far as the Atlantic coast of South America.

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